give sulpharsphenamine weekly for ten injections, and for adults the dose should be 0.6 grams each.

A. EDWARD ROOME, M. D. (Medico-Dental Building, Los Angeles)—In my opinion sulpharsphenamine has a very definite place in therapy, and after a thorough trial of this drug at my clinic I have come to the same conclusion as to its value as mentioned by Alderson.

There is no doubt that its use inframuscularly is the ideal way of administering the drug on account of the slow absorption and its practical freedom from nitroid reactions.

# DERMATOLOGY AS MEDICAL SCIENCE, HEALING ART AND PRACTICE OF MEDICINE †

#### By Moses Scholtz \*

THE dermatologist engaged in unraveling and solving the diagnostic and therapeutic problems of individual patients hardly ever pauses long enough to survey the field of dermatology as a whole. Yet a study of dermatological research, of its possibilities and limitations; of the evolution of dermatology as a science; and the analysis and study of the relationship of the component units of dermatologic thought—morphology, histopathology, and pathogenesis is of great value and interest.

Besides the purely abstract and academic aspects of the subject, many practical problems of dermatology invite study, such as the relationship of dermatology to general medicine and to other specialties and the establishment of proper boundaries between them; the teaching of dermatology to undergraduates and graduates; the organization of dermatologic service in hospitals and clinics; the statistical survey and study of skin diseases, the analysis of dermatologic literature, cosmetic dermatology, dermatologic quackery, etc.

## WHAT IS DERMATOLOGY?

The generally accepted definition is simple and implies the study and care of all diseases and lesions of the skin. But the establishment of the strict boundaries of dermatology from other branches of clinical medicine is not so easy, since skin lesions often develop as passing, incidental and minor symp-

† Chairman's address, Section on Dermatology and Syphilis, presented at meeting of California Medical Association, Oakland, California, May 1, 1926. toms of various more general diseases. The dermatologist is interested in them from the diagnostic point of view only.

Trophoneurotic or vasomotor dermatoses, such as Raynaud's disease, trophoneurotic ulcers and degenerations are described and treated simultaneously in manuals of dermatology, surgery, neurology, and medicine. It is my belief that dermatology should comprise any and all skin lesions, whether they are big and lasting enough to constitute independent dermatologic entities or are merely an incidental symptom of systemic affection. In the latter case the lesions should be accorded a proper place in the morphologic classification.

#### DERMATOLOGY VERSUS GENERAL MEDICINE

Because of the enormous frequency of skin lesions as manifestations of systemic conditions, only a very small fraction of the grand total of patients with skin lesions reach dermatologists; as a rule, only those that present diagnostic or therapeutic difficulties. The overwhelming majority of patients with skin lesions are treated by general practitioners, pediatricians, surgeons, and radiologists. Yet practitioners frankly admit their inadequate knowledge of diseases of the skin. The peculiar lack of interest in and disregard for dermatology as a specialty of medicine, in my opinion, is due to the defective methods of teaching dermatology.

This situation brings to dermatologists an allimportant duty of restoring the interest and esteem of the general profession to his specialty. Some practitioners consider dermatology rather detached from the general subject of medicine, the understanding of which can be acquired only by an accumulated experience of many years.

It is my experience that the general practitioner, if demonstrated the rational methods of differential diagnosis, quickly grasps the idea that dermatologic diagnosis is more than an empirical product of individually accumulated experience, and he begins to enjoy the intellectual process of arriving at diagnosis through the correct principles and technic of differentiation.

# DERMATOLOGY AS SCIENCE

The analytical study of the resources and limitations of dermatology as a medical science is a fascinating but insufficiently clarified problem. Some of the fundamentals may be deduced from the analysis of the skin as a subject of study. The skin being located on the surface of the body is subject to direct examination. This unique diagnostic and therapeutic opportunity explains why the inspection plays such a dominant part in dermatologic diagnosis. The extensive area occupied by the skin and the possibility of innumerable variations in localization, distribution, grouping and shape of lesions, makes for the steady growth of morphology as a paramount factor in dermatologic diagnosis.

The technical ease and impunity with which a biopsy can be performed has led to the development of another important diagnostic method—the histopathological examination. This dual morphologic and histopathologic basis of the dermatologic

syphinis, presented at ineeting of California Medical Association, Oakland, California, May 1, 1926.

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diagnostic technic has been for a long time the only accepted procedure, and even now is sufficient in many patients. However, with the steady growth of the laboratory, various procedures, such as urinalysis, blood chemistry, bacteriologic examination, etc., are invoked with ever-increasing frequency.

#### MORPHOLOGY VERSUS HISTOPATHOLOGY

The relative value of morphology and histopathology in dermatologic diagnosis is of great interest. Theoretically, by analogy with other branches of clinical medicine, the histopathologic findings should be the final verdict in the interpretation of skin lesions. Actually, histopathology has proved to be a great disappointment. Only in certain selected patients does it supply definite diagnostic information not revealed by the clinical and laboratory findings. In many cases, particularly inflammatory dermatoses, it is indefinite and inconclusive.

#### MORPHOLOGY

The final value and function of morphology in dermatologic research deserves a more detailed consideration. Being historically the first basic dermatologic conception, morphology has developed more extensively than any other phase of dermatologic research. Because the minds of dermatologists for many generations were dominated by the static conception of dermatoses, as rigid and stationary morphologic patterns or pictures, this growth has assumed an exuberant and inward form. As a result, over-refinement and multiplication of morphologic details became an end and purpose. The structure of morphology grew so immense as to become a source of despair and a bewilderment to the general practitioner and an object of confusion even to a trained dermatologist. An enormous amount of effort is still wasted in many dermatologic contributions in fruitless efforts to establish a new dermatologic entity on morphologic details.

## DYNAMIC VERSUS STATIC MORPHOLOGY

The adverse and hampering effect of the excessive growth of static morphology on the clinical, didactic and research work in dermatology was pointed out two years ago at the meeting of the Section in Los Angeles. At that time I stressed the irrationality of the static morphologic conception of dermatoses and attempted to introduce the dynamic point of view. The dynamic conception of skin morphology interprets skin lesions as merely skin reactions to systemic or local irritants-reactions which are unstable morphologically and which can merge and combine with each other, or even transform one into another. The hypothesis of the morphologic instability of cutaneous lesions, in my opinion, is the only one that solves the difficulties and inconsistencies of the present classification. The astounding progress of dermatology in the last generation is due directly to the influx of the dynamic biologic ideas and principles from general medicine and applications of these ideas to the pathogenesis and treatment of dermatoses. The theories of focal infection. of endocrine secretions, of anaphylaxis, of nonspecific proteid immunization, are all based on a fundamental dynamic conception that systemic skin dis-

eases are merely biologic skin reactions capable of a great morphologic mobility and variability. The obvious inference is that the insistence on the minutest morphologic details as the permanent characteristics of individual dermatoses, as it has been done in the past, is not in accord with the whole modern dynamic conception of the pathogenesis of dermatoses. Neither is the static conception born out by clinical observation, since morphologic phenomena of dermatoses are liable to various secondary changes during the course of their clinical evolution.

#### DERMATOLOGY AS HEALING ART

Since the primary function of any branch of medicine is healing of disease, the evaluation of dermatology as a healing art is of great practical interest. Among the factors which are important in the evaluation of any branch of medicine as a healing art can be considered the frequency of the particular type of affection, the exactness and efficiency of diagnosis, the character of prognosis, the efficacy of treatment, and the objective and subjective quality of service.

The relatively larger area of the skin in comparison with any other organ multiplies tremendously the possibilities of the occurrence of the skin lesions. The very conspicuousness of the skin lesion in contradistinction to the lesion of a visceral organ precludes the possibility of its being overlooked or ignored, and renders the skin lesion one of the most common. As a rule a patient with a skin lesion is prompted by a triple motive to seek medical advice, the distressing itching, the disfigurement, and the horror of skin diseases, since many laymen believe that many skin diseases are expressions of a blood poisoning breaking out on the surface. The value of the service of the dermatologist to the individual and community is not realized generally. The dermatologist, through a correct interpretation of skin lesions which may be the earliest or the only symptom of a systemic serious disorder, often is capable of detecting the first sign of an impending danger. Thus the timely recognition of the dermatologic syndromes of syphilis, tuberculosis, diabetes, leukemia, endocrine disorders, and skin cancer is part of the daily work of a dermatologist. The value of dermatologic training in the recognition of infectious exanthemata and contagious diseases is obvious.

# DERMATOLOGIC DIAGNOSIS

The diagnosis of skin diseases is much easier than in other branches of medicine because all the evidence is on the surface. It requires no complicated instruments or technic to bring out symptoms. Adequate training of visual acuity, experience and, most important, solid grounding in dermatologic reasoning and principles of differential diagnosis are essentials to competency to make a correct diagnosis. Dermatologic diagnosis is based more on objective and less on history and laboratory findings than in other specialties. It is possible to make the diagnosis on the mere inspection of the lesions in the majority of patients and to place them in a certain clinical morphologic and pathologic group. The full history and laboratory findings are desirable for each and every patient, but in sharp contrast to internal medicine they are not always necessary. In many patients they merely supply details of information in regard to the etiologic factors and pathologic structure.

#### DERMATOLOGIC PROGNOSIS

Some laymen have an extremely pessimistic attitude as to the curability of skin diseases. This is not surprising, considering the fact that modern actinotherapy, which has completely revolutionized the treatment and prognosis of skin diseases, is hardly a generation old. Particularly interesting and even amusing is the widespread idea among laymen that eczema is an incurable disease; even more interesting is the fact that some physicians also consider most of the chronic skin diseases as practically incurable and subject, at the best, only to temporary improvement. This attitude is to be explained by the unfortunate fact that some physicians are helpless when called upon to treat a chronic dermatosis even of a quite usual type, because of the lack of dermatologic training in diagnosis and treatment and also because of the lack of modern therapeutic equipment.

The rapidity of improvement under modern dermatologic treatment of a patient who has resisted many months, or even years, of haphazard and indifferent attention is so striking as to emphasize most dramatically the defectiveness of dermatologic training in medical colleges, particularly of the last generation. The tremendous advances in diagnosis and modern actinotherapy have improved immensely the general prognosis of skin diseases. We still have some rebellious and even incurable dermatoses, but they are comparatively rare and shade numerically into insignificance compared with the enormous number of patients whom we are able to cure, or at least give partial relief. Most patients with localized dermatoses tumors and growths, including skin cancer, parasitic and mycotic dermatoses and infectious granulomata are entitled to excellent prognosis. Most of the inflammatory dermatoses, particularly eczema, lichen, lupus erythematosus, acne and many others yield readily to modern treatment.

The most intractable and persistent are the neurotrophic, vasomotor degenerative, disturbances of pigmentation, diseases of the nails and hair. We have to admit that the old thorn in the dermatologist's crown, psoriasis, is still practically incurable and admits of only temporary improvement.

# DERMATOLOGIC TREATMENT

Dermatologic therapeutics consists of internal and local medication and physiotherapy. In chronic dermatoses, physiotherapeutics, by its superior efficiency, has largely superseded ointments and lotions, which are used at present only as supplementary treatment. Medication is limited to a small number of drugs. However, their use in various strength and combinations offers possibilities of great shading in dosage and numerous formulas. The most common therapeutic error in the treatment of skin diseases is overtreatment and excessive use of irritating ingredients. This is largely due to lack of individualization, which is the result of an old-time habit inherited from medical college where stock formulas

and prescriptions are recommended for various dermatoses. This responsibility obviously lies with the defective method of teaching dermatology by failure to emphasize that individualization is the most important factor in successful dermatologic treatment.

## DERMATOLOGY AS PRACTICE OF MEDICINE

The practice of dermatology offers to its devotee opportunities for intellectual activities and scientific study equal to those in any other branch of medicine. It requires correct color perception, power of observation of minute morphologic details, balanced clinical judgment and analytical capacity in making differential diagnosis. To avoid the pitfalls and deficiency of overspecialization it requires an understanding and grasp of general medicine and pathology. The modern technic of dermatologic diagnosis and modern therapeutic armamentorium offer to a dermatologist splendid, and compared with other branches of clinical medicine, a comparatively easy means and splendid equipment for efficient work.

To relieve a patient of distressing itching, which, if prolonged, is more intolerable to many than most intense pain; to free him of disfigurement, which makes life for many, particularly women, unbearable; to free him from the agony of fear of blood disease makes the skin patient extremely appreciative and renders the life of a well-trained dermatologist pleasant and rich in satisfaction.

Lastly, dermatology, as a specialty, pays well for the hardships and cost of good training. It is a matter of wonder and regret that the young men of the profession neglect and overlook this splendid opportunity for professional advancement, and crowd surgery and other branches of medicine where they are not needed. Dermatology at present is one of the few branches of medicine where the supply, even in the large cities, is far below the demand. There are cities of 50,000 to 100,000 without a well-trained dermatologist.

The old time-honored but irrational and illegitimate liaison of dermatology and genito-urinary diseases fortunately is becoming a matter of the past. Either of these specialties, having nothing in common but tradition, is big enough by itself to be a life study and to tax fully the intellectual capacity and skill of any man.

# HOSPITAL SERVICE AND CLINICS

One of the important and pressing problems before dermatologists is to gain for dermatology the high status of recognition which is its due. It is lamentable that even in large hospitals dermatologists do not gain proper recognition and the dignity of an independent service and separate wards. The dermatologist acts mostly as an ambulant consultant for other departments. An out-patient skin clinic is so far his only unchallenged abode. The abnormality of such condition and the adverse effect on the quality of dermatologic service and clinical research is obvious. The creation in public clinics of a dermatologic service separate from the urological department is another problem of only slightly less importance.

#### POSTGRADUATE CLINICS

I believe that an educational campaign of intensive courses in dermatology is badly needed and can be successfully inaugurated. It is my contention, proved repeatedly in graduate courses, that in six weeks of intensive training a general practitioner can be taught the best methods of dermatologic reasoning and master a sufficient number of basic facts of differential diagnosis and rational dermatologic medication to enable him to diagnose and treat intelligently an average patient.

#### DERMATOLOGIC QUACKERY

One of the most crying, though by no means a new evil in dermatologic practice, is dermatologic quackery. The steadily growing utilization of physiotherapy in dermatology has brought out an incubus of a commercial exploitation of these agencies by the irregular cultists, beauty parlors, and outright quacks. The intensive publicity campaign by the manufacturers of physiotherapeutic appliances and extravagant exploitation of the medical literature for commercial purposes has brought out the indiscriminate and promiscuous use of physiotherapy in skin diseases by those who have the price of the machinery. The unfortunate social and professional consequences of this situation become daily more tangible. The gullible public is being again gouged and exploited by fraudulent claims of pseudoscientists. Physicians, on the other hand, are being injured by the recoil of public opinion charging them with a responsibility for the failures of the incompetent and the unscrupulous. Physiotherapy in skin diseases is in danger of being discredited as a useless and fraudulent practice. It is our duty as dermatologists to counteract the flood of commercialism and to restore dermatologic physiotherapy to the high status to which it is entitled.

## COSMETIC DERMATOLOGY

The last, but by no means the least, problem before us is so-called cosmetic dermatology. The hectic movement of modern society toward an exaggerated appreciation of physical attraction and cult of personal beauty has caused an enormous demand for remedies and methods of improving the facial complexion, hair, nails, etc. This demand has been amply supplied and in fact cultivated by beauty parlors and individual beauty specialists. As an extreme manifestation of this tendency, there has developed plastic surgery of cosmetic facial corrections, straightening noses, removing of wrinkles, lifting chins, etc.

The number of women who, in the quest for beauty and rejuvenation, have been permanently injured, disfigured or even killed by cosmetic operations, paraffin injections, peeling cures, etc., at the hands of beauty specialists is steadily mounting to an alarming degree.

Dermatologists engrossed in more serious problems are likely to assume a holier-than-thou attitude and consider it below their dignity to cater to cosmetic dermatology. I plead guilty to this very feeling in the matter. Yet I believe the only effective measure of counteracting this destructive wave of quackery is for the dermatologists to take up this work and integrate it into their practice.

A happy compromise may be reached by dermatologists doing only diagnostic and surgical work, and supervising the technical and mechanical work which can be done by nurses and technicians. It is my firm belief that the public at large will greet with delight such a step, since the public patronizes the quack and cultist only because the physicians refuse or are unable to render the requested type of service.

#### CONCLUSION

This discourse presents the chief problems pressing for solution in the field of dermatology. I believe that they deserve serious consideration. Their importance is based on the fundamental principle that in medicine, as in any other branch of science, the solution of the practical problems depends ultimately on correct understanding and knowledge of underlying abstract principles, basic general laws and the relationship to each other of various parts of the respective science.

# THE DISCUSSION OF SCIENTIFIC PAPERS † By WILLIAM H. DUDLEY \*

The Editor—Doctor Dudley here frankly discusses a deadly poison which is chiefly responsible for so many lethargic medical gatherings. His timely message about speakers applies with even greater force to writers. After all, a speaker may lull only a handful of people into somnolence, but the poorly prepared published message wearies thousands who are ever searching for worthwhile messages, and it invariably defeats one of the objects of the author—the laudable desire to secure the good-will of his colleagues.

The biographies of great orators, statesmen and scientists inform us that their successful "extemporaneous" addresses had had much study and many rehearsals.

Successful authors, practically without exception, revise their manuscripts from five to ten times before they submit them to an editor. It took Carl Sandburg over twenty years to write the Lincoln "Prairie Years," now pronounced the American epic.

While Doctor Dudley's advice was directed to the members of the Eye, Ear, Nose, and Throat Section of the California Medical Association, it is good medicine, so to speak, for all speakers and writers.

THE formation of the habit of clear thinking and the proper expression of one's thoughts while standing before an audience is well worth the effort and practice, however much it may require to enable one to properly present the subject in mind;

† Chairman's Address, California Medical Association's Section on Eye, Ear, Nose, and Throat, delivered at Oakland, April 29, 1926.

land, April 29, 1926.

\* William Henry Dudley (520 West Seventh Street, Los Angeles). M. D. University New York City, 1882. Graduate study: University of California, Los Angeles, 1906; Ophthalmic and Aural Institute, New York, Resident Assistant. Practice limited to Eye, Ear, Nose, and Throat since 1893. Hospital connections: Surgical Staff Hollywood Hospital. Previous honors and services: Air Service, Chief Examiner, Aviation Eye Service, Los Angeles, 1917-18. Publications: "Cerebral Abscess Following Chronic Otitis Media: Operation, Recovery, Laryngoscope, 1900"; "The Prognostic Importance of Inflammation of the Optic Nerve and Retina in Chronic Bright's Disease" (Lehigh Valley Med. Mag., Vol. 6); "A Few Reasons for Early Operation in Acute Mastoiditis" (Penn. Med. Journ., 1901); "Metamorphosia Varians" (Journ. A. M. A., 1902); "Absorption of Lens Nucleus in a Patient, Age 66 Years" (Ophthalmology, July, 1913); "Parosmia" (Transactions of Lar. Rhin. and Oto. Society, 1918); "Perspective for Aviators" (American Journ. Ophthal., February 1919), and about fifteen others.